

Amendments to the Claims

This claim listing replaces all prior versions and listings of claims in the application.

1-14 (Canceled)

15. (Currently Amended) A controlled structure copolymer comprising at least two parts A and B, of which have different compositions,

wherein part A ~~comprising~~ comprises ionic or potentially ionic units, and
further wherein:

part A is [[an]] amphoteric or zwitterionic ~~part, comprising and comprises:~~

cationic or potentially cationic units A_C,

anionic or potentially anionic units A_A, and

optionally, hydrophilic and/or hydrophobic neutral units A_N,

and/or

zwitterionic units A_Z,

optionally, cationic or potentially cationic units A_C,

optionally, anionic or potentially anionic units A_A, and

optionally, hydrophilic and/or hydrophobic neutral units A_N, and

part B is not [[an]] amphoteric or zwitterionic [[part]].

16. (Currently Amended) The copolymer ~~as claimed in of~~ claim 15, wherein part B is a hydrophilic or hydrophobic neutral part comprising hydrophilic or hydrophobic neutral units.

17. (Currently Amended) The copolymer ~~as claimed in of~~ claim 15, wherein said copolymer has ~~having~~ one of the following structures:

a block copolymer~~[[,]]~~ comprising at least two blocks, wherein part A ~~corresponding~~
corresponds to one block of the block copolymer, and part B ~~corresponding~~ corresponds to

another block of the block copolymer, and further wherein part A optionally ~~having~~ has a composition gradient,

a comb or grafted copolymer~~[[,]]~~ comprising a backbone and side chains, wherein with part A corresponding corresponds to the backbone, and part B corresponding corresponds to side chains, or wherein with part B corresponding corresponds to the backbone and part A corresponding corresponds to side chains, or

a star or microgel copolymer~~[[,]]~~ comprising a polymeric or nonpolymeric core~~[[,]]~~ and peripheral polymeric chains, wherein one part of parts A and B corresponding corresponds to the core, the other of parts A and B corresponding corresponds to the peripheral chains.

18. (Currently Amended) The copolymer ~~as claimed in of~~ claim 15, having comprising a (block A)-(block B) diblock copolymer, a (block A)-(block B)-(block A) triblock copolymer or a (block B)-(block A)-(block B) triblock copolymer.

19. (Currently Amended) The copolymer as claimed in claim 15, wherein said copolymer is obtained by ~~means of~~ a controlled radical polymerization ~~process~~.

20. (Currently Amended) The copolymer ~~as claimed in of~~ claim 15, wherein part B is a neutral part, and ~~in that~~ part A has a positive, negative or neutral average charge Q.

21. (Currently Amended) The copolymer ~~as claimed in of~~ claim 15, wherein said copolymer is being in the form of a powder, ~~in the form of~~ a dispersion in a liquid, or ~~in the form of~~ a solution ~~in a solvent~~.

22. (Currently Amended) The copolymer ~~as claimed in of~~ claim 15, wherein the units A_c are derived from ~~[[the]]~~ monomers comprising ~~[[are]]~~:

N,N-(dialkylamino- ω -alkyl)amides of α,β -monoethylenically unsaturated carboxylic acids, α,β -monoethylenically unsaturated amino esters,

vinylpyridines,

vinylamine,

vinylimidazolines,

monomers that are precursors of amine functions which give rise to primary amine functions by simple acid or base hydrolysis,

acryloyl- or acryloyloxyammonium monomers,

N,N-dialkyldiallylamine monomers, **[[or]]**

polyquaternary monomers, **or**

mixtures thereof.

23. **(Currently Amended)** The copolymer ~~as claimed in of~~ **claim 22**, wherein the units **A_C** **are** derived from **[[the]]** monomers **comprising:** **[[are]]**

N,N-dimethylaminomethylacrylamide, N,N-dimethylaminomethylmethacrylamide, 2-(N,N-dimethylamino)ethylacrylamide, , 2-(N,N-dimethylamino)ethylmethacrylamide, 3-(N,N-dimethylamino)propylacrylamide, 3-(N,N-dimethylamino)propyl methacrylamide, 4-(N,N-dimethylamino)butylacrylamide, 4-(N,N-dimethylamino)butylmethacrylamide, 2-(dimethylamino)ethyl acrylate (DMAA), 2-(dimethylamino)ethyl methacrylate (DMAM), 3-(dimethylamino)propyl methacrylate, 2-(tert-butylamino)ethyl methacrylate, 2-(dipentylamino)ethyl methacrylate, 2(diethylamino)ethyl methacrylate, N-vinylformamide, N-vinylacetamide,

trimethylammonium propyl methacrylate chloride, trimethylammonium ethylacrylamide chloride, trimethylammonium ethylacrylamide bromide, trimethylammonium ethylmethacrylamide chloride, trimethylammonium ethylmethacrylamide bromide, trimethylammonium butylacrylamide methyl sulfate, trimethylammonium butylmethacrylamide

methyl sulfate, trimethylammonium propylmethacrylamide methyl sulfate (MES), (3-methacrylamidopropyl)trimethylammonium chloride (MAPTAC), (3-acrylamidopropyl)trimethylammonium chloride (APTAC), methacryloyloxyethyltrimethylammonium chloride, methacryloyloxyethyltrimethylammonium methyl sulfate, acryloyloxyethyltrimethylammonium chloride,

1-ethyl-2-vinylpyridinium bromide, 1-ethyl-2-vinylpyridinium chloride, 1-ethyl-2-vinylpyridinium methyl sulfate, 1-ethyl-4-vinylpyridinium bromide, 1-ethyl-4-vinylpyridinium chloride, 1-ethyl-4-vinylpyridinium methyl sulfate;

N,N-dimethyldiallylammonium chloride (DADMAC);

dimethylaminopropylmethacrylamide chloride, or N-(3-chloro-2-hydroxypropyl)trimethylammonium (DIQUAT)₂

trimethylammonium ethyl acrylate methyl sulfate (ADAMquat), or mixtures thereof.

24. (Currently Amended) The copolymer ~~as claimed in~~ of claim 15, wherein the units A_A are derived from ~~[[the]]~~ monomers comprising: ~~[[are]]~~

α,β-ethylenically unsaturated carboxylic acids or ~~[[the]]~~ corresponding anhydrides, or their water-soluble salts~~[[,]]~~;

precursors of carboxylate functions, which, after polymerization, ~~give rise to~~ form carboxylic functions by hydrolysis~~[[,]]~~;

monomers having at least one sulfate or sulfonate function, or their water-soluble salts~~[[,]]~~;

monomers having at least one phosphonate or phosphate function, the esters of ethylenically unsaturated phosphates, or ~~their water-soluble salts;~~ or

mixtures thereof.

25. (**Currently Amended**) The copolymer ~~as claimed in~~ of claim 24, wherein the units A_A ~~are~~ comprise acrylic, methacrylic or maleic acids or anhydrides, fumaric acid, itaconic acid, N-methacroylalanine, N-acryloylglycine, tert-butyl acrylate, 2-sulfooxyethyl methacrylate, vinylbenzene sulfonic acid, allyl sulfonic acid, 2-acrylamido-2-methylpropane sulfonic acid, sulfooethyl acrylate or methacrylate, sulfopropyl acrylate or methacrylate, vinylphosphonic acid, the phosphates derived from hydroxyethyl methacrylate or the phosphates derived from polyoxyalkylene methacrylates.

26. (**Currently Amended**) The copolymer ~~as claimed in~~ of claim 15, wherein the units A_N ~~are~~ derived from ~~[[the]]~~ monomers ~~[[are]]~~ comprising:

vinylaromatic monomers,

vinyl halides, vinylidene halides,

C₁-C₁₂ alkylesters of α,β -monoethylenically unsaturated acids,

vinyl esters of saturated carboxylic acids, allyl esters of saturated carboxylic acids,

α,β -monoethylenically unsaturated nitriles ~~containing~~ having from 3 to 12 carbon atoms,

α -olefins,

conjugated dienes,

monomers ~~capable of generating that generate~~ polydimethylsiloxane chains,

hydroxyalkyl esters of α,β -ethylenically unsaturated acids,

α,β -ethylenically unsaturated amides,

α,β -ethylenically unsaturated monomers bearing a water-soluble polyoxyalkylene segment of the polyethylene oxide type,

α,β -ethylenically unsaturated monomers which are precursors of hydrophilic units or segments, which, once polymerized, can be hydrolyzed ~~in order to give rise to~~ to form vinyl alcohol units or polyvinyl alcohol segments,

vinylpyrrolidones, [[or]]

α,β -ethylenically unsaturated monomers of the ureido type, or
mixtures thereof.

27. (Currently Amended) The copolymer ~~as claimed in~~ of claim 26, wherein the units A_N are comprise:

styrene, alpha-methylstyrene, vinyltoluene,

vinyl chloride, vinylidene chloride,

methyl, ethyl or butyl acrylates and methacrylates, 2-ethylhexyl acrylate,

vinyl or allyl acetates, propionates, versates, stearates,

acrylonitrile, methacrylonitrile,

ethylene,

butadiene, isoprene, chloroprene,

hydroxyethyl or hydroxypropyl acrylates and methacrylates, glyceryl monomethacrylate, acrylamide, N,N-dimethylmethacrylamide, N-methylolacrylamide,

polyethylene oxide α -methacrylates or α,ω -dimethacrylates, ω -benenyl polyoxyethylene methacrylate, and ω -tristyrylphenyl polyoxyethylene methacrylate,

vinyl acetate,

vinylpyrrolidones, [[or]]

2-imidazolidinone-ethyl methacrylamide, or
mixtures thereof.

28. (**Currently Amended**) The copolymer ~~as claimed in~~ of claim 15, wherein the units A_Z are derived from [[the]] monomers [[are]] comprising:

sulfobetaine monomers, phosphobetaine monomers, [[or]] carboxybetaine monomers, or mixtures thereof.

29. (**Currently Amended**) The copolymer ~~as claimed in~~ of claim 28, wherein the units A_Z are comprise:

sulfopropyl dimethylammonium ethyl methacrylate, sulfopropyl dimethylammonium propylmethacrylamide, sulfopropyl-2-vinylpyridinium, [[or]] phosphatoethyl trimethylammonium ethyl methacrylate, or mixtures thereof.

30. (**Currently Amended**) The copolymer ~~as claimed in~~ of claim 15, wherein part B comprises units derived from hydrophobic neutral monomers ~~which are~~ comprising:

vinylaromatic monomers,

vinyl halides, vinylidene halides,

C_1 - C_{12} alkylesters of α,β -monoethylenically unsaturated acids

vinyl esters of saturated carboxylic acids, allyl esters of saturated carboxylic acids,

α,β -monoethylenically unsaturated nitriles ~~containing~~ having from 3 to 12 carbon atoms,

α -olefins,

conjugated dienes, [[or]]

monomers capable of generating polydimethylsiloxane chains, or mixtures thereof.

31. (**Currently Amended**) The copolymer ~~as claimed in~~ of claim 30, wherein the units of part B are derived from hydrophobic neutral monomers ~~which are~~ comprising:
styrene, alpha-methylstyrene, vinyltoluene,

vinyl chloride, vinylidene chloride,
methyl, ethyl or butyl acrylates and methacrylates, 2-ethylhexyl acrylate,
vinyl or allyl acetates, propionates, versatates, stearates,
acrylonitrile, methacrylonitrile,
ethylene,
butadiene, isoprene, [[or]] chloroprene, or
mixtures thereof.

32. (Currently Amended) The copolymer ~~as claimed in~~ of claim 17, wherein said copolymer has having a block copolymer structure[[,]] comprising at least two blocks, ~~part A corresponding to one block, part B corresponding to another,~~ further wherein part A having has a homopolymer[[,]] structure if it comprises units Az, a random copolymer structure, or a composition gradient copolymer structure.

33. (Currently Amended) A detergent composition, fabric care composition, [[a]] or composition for cleansing, treating and/or protecting the skin and/or the hair, comprising ~~a copolymer as defined in claim 15~~ the copolymer of claim 15.